Dr Louise McNutt
Belfast High School 1996- 2003
Head Girl 2002-2003

BA (Cantab.) 2006 Medical Sciences & Intercalation in Spanish (University of Cambridge)
MBBS, 2009, (University College London)
MA (Cantab.) 2009

Now working as a Foundation Doctor in London and hoping to return home to NI for further training and work.

What made you decide to study medicine?
I always knew that I wanted to study Medicine and be a doctor. My first taste of medical sciences was during my work experience. The School helped me to balance my extra-curricular activities with academic studies in Biology, Chemistry, Mathematics and Spanish. I received support in studying for my A Levels from the excellent staff at the School.

What advice would you give to someone else wanting to study in this area?
Despite pre-conceptions and recent increased demands for acceptance into medicine, it **is** achievable. If it is what you want, *GO FOR IT*! If you work hard and choose not only subjects that are necessary for entry into medicine (eg Chemistry) but also those you enjoy you will achieve the grades required. I personally chose a language and studied this as an intercalated degree in Cambridge. Make sure that you use the advice of the Careers Department in the School.

Dr Rory Beattie
Belfast High School 1996- 2003
Head Boy 2002-2003

BA (Cantab.) 2006
MBBS, 2009, (University College London)
MA (Cantab.) 2009

Now working as a Foundation Doctor in Craigavon Intensive Care Unit and teaching anatomy to 1st and 2nd year QUB medical students.

What made you decide to study medicine?
I always enjoyed Maths and Science. Medicine gave me the opportunity to use Science in a practical way. You need a good scientific knowledge to practise Medicine but I wanted a career which would make a difference to peoples' lives. The brilliant interactive teaching styles at BHS taught me to think and study independently. We were constantly pushed hard in class. I studied Biology, Chemistry, Mathematics and Physics. The School prepared me well for the supervisions at Cambridge. I still rely on the skills I developed at school when facing my most challenging clinical work.

What advice would you give to someone else wanting to study in this area?
When I started my studies at Cambridge many of my peers were very confident individuals who had attended well-known Public Schools. I feel BHS provided me with not only a really solid science background, but also a self-confidence which enabled me to compete successfully without feeling intimidated.

Louise and Rory each attained 4 A grades at A level.

HIGHLIGHTS

News from Belfast High School

STEM Edition
Dec 2010

STEM SPECIAL EDITION

Engineering News
Congratulations to Douglas Thompson and Andrew Kingston on their selection for the Sentinus 'Insight into Engineering' Course organised by Queen's University Belfast and the University of Ulster.

Congratulations also to former pupil Alan McCreanor who has recently achieved a 1st Class Honours Degree from St John's College, Cambridge, in Chemical Engineering. Alan will be made a Scholar of St John's College for 2010-11 and has also been awarded a College Prize.

CCEA Top Achievers
Well done to Daniel Cavey who was placed 3rd in Northern Ireland in GCSE Mathematics in summer 2010. Daniel is continuing his studies in Mathematics and Further Mathematics at A Level. He is also studying Physics and Geography and plans to study Mathematics at university with a view to teaching as a career.

STEM Bus Visits BHS
Our Year 11 pupils were among the first to visit the Department of Education's STEM Module where they had the opportunity to participate in practical activities related to Science, Technology, Engineering and Mathematics.

The bus will be visiting the School again on 7 December as part of the launch event of our SEP/STEM 3-year programme.

International School Award 2008-2011 · iNet · Specialist Schools and Academies Trust · The Schools Network · Sharing Education Programme

SEP: What is the Sharing Education Programme?

The Sharing Education Programme provides funding for three year partnerships between schools and enhanced educational opportunities for the pupils of those schools. The programme is funded by the International Fund for Ireland and Atlantic Philanthropies and is managed by the Queen's University of Belfast.

Professor Tony Gallagher, Pro-Vice Chancellor of Queen's University, writes that the Sharing Education Programme 'encourages schools from across all the sectors to work together for the greater good of their pupils.' He continues, 'Real, practical evidence has been provided…that collaboration works to the benefit of schools and pupils.'

Belfast High School is one of the small group of schools in Northern Ireland which has received SEP funding, and our focus over the next three years is on Science, Technology, Engineering and Mathematics, as these subjects have been recognised as strengths of the School.

Belfast High leads successful bid to develop Science, Maths and Engineering

Belfast High School has led a successful bid to secure funding for the development of STEM (Science, Technology, Engineering and Maths) within the School and two other local post-primary schools, Hazelwood Integrated College and Dominican College, Fortwilliam.

The successful bid was based upon Belfast High School's exciting and ambitious 3-year plan for the promotion of STEM. It will put the School at the heart of regional drives in Science, Technology, Engineering and Maths and will lead to enhanced opportunities for Belfast High pupils. These opportunities include:

- all year 8 pupils receiving the CREST accreditation (the prestigious Bronze quality mark from the British Science Association) following a series of collaborative, high-quality learning projects aimed at promoting investigative thinking and problem-solving;
- the introduction of GCSE electronics and engineering as subject choices;
- the development of an online learning environment for our pupils dedicated to Science, Maths and Technology resources;
- the opportunity to acquire accreditation in Science at age 14;
- enhanced opportunities to undertake Science-related projects with industry and business at post-16 level.

Belfast High School is also planning one of the largest STEM careers conferences to be held for pupils in Northern Ireland. The event will take place at the University of Ulster on 7 February 2011.

STEM has been given significant prominence by educationalist and business leaders alike in Northern Ireland and is viewed as a key component in securing a stable economic future for the province and its inhabitants. The STEM Report which was published in September 2009 by the Department for Employment and Learning outlines the crucial role which STEM in schools will play in preparing pupils for the world of work in the twenty-first Century.

Orla Sheehan Pundyke
Belfast High School 2004 - 2010

Orla achieved 9 A* grades at GCSE and 3 A* grades in A Level Chemistry, Mathematics and Physics. She undertook laboratory work in QUB in the summer of 2009 after being awarded a Nuffield Science Bursary.

Orla was accepted to Hertford College, Oxford this year to read Chemistry.

Former Pupil Profile
Samantha McCullough
Belfast High School 1996- 2003
MChem – New College, Oxford (1st Class)

Currently undertaking a further degree in Dentistry at Queen's University Belfast.

What made you decide to study a STEM subject?
Chemistry was a subject that I enjoyed immensely at BHS because of a brilliant and enthusiastic teacher. As a consequence of his love and interest for the subject, Chemistry was always a serious contender for my subject choice. After completion of my degree I decided to seek employment in the Barclays Graduate Programme. As Chemistry is not directly a vocational degree I was aware of how useful it could be; it offered good prospects. I studied Chemistry, Mathematics and Latin for A level and French to AS level.

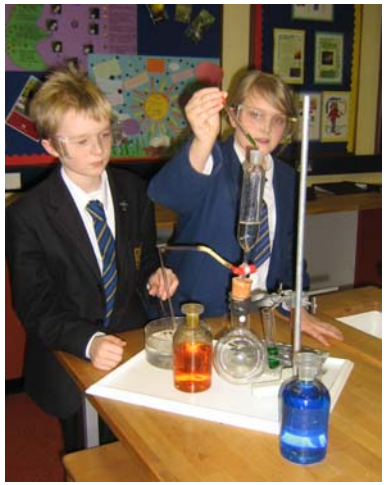
Working with Barclays provided me with opportunities in a major global bank with an option to travel. The job allowed me to develop a lot of skills in leadership and management. However, during my work with Barclays, I decided to go back to university and study Dentistry.

What advice would you give to someone else wanting to study in this area?
Through my degree I was made aware that many global and industrial companies actively encourage Science graduates through their Graduate Programmes. For employers, Science graduates are always in demand. These companies have a preference for Science Graduates as they are adaptable and skilled. As a consequence of a successful science education, initiated at BHS, I could have entered into many of these companies; however I elected to leave Barclays and retrain as a Dentist at QUB.

There is and was unequivocal support from all my teachers when I was taught at BHS; they were always willing 'to go the extra mile'. When I contacted the School as a former pupil to study an additional science, for entry into QUB, I was supported in both my application and my exams. Not only was I given support through subject notes and resources, I was also encouraged to sit the examinations in the School and complete my A level Biology and attain my A grade.

The pastoral care system at BHS is second to none. All my teachers were incredibly supportive during my sixth form years when I had to deal with extremely difficult family circumstances.

My advice is to follow your dream - the School will support you all the way!



SCIENCE AT BELFAST HIGH SCHOOL

What we provide:

Provision for pupils at Belfast High School is broad and balanced:

At Key Stage 3 all pupils attend classes in the separate sciences of Physics, Chemistry and Biology, each taught by a subject expert.

At Key Stage 4 pupils have the widest choice of science in this school's catchment area. We offer GCSEs in Physics, Chemistry, Biology, Double Award and Single Award Science.

In the Sixth Form at A Level we have 6 Biology classes, 3 of Chemistry and 3 of Physics. We also have 8 A Level Mathematics classes and 2 of Technology.

Pupils from other schools in the Newtownabbey area come to Belfast High School to study A Level Chemistry and Mathematics.

What we achieve:
Pupils' results in Science at Belfast High School are excellent:

Results at Key Stage 3 in Science have been consistently above the NI Grammar School average.

Over the last three years at GCSE, Physics and Single Award Science have been between 5-10% above the Northern Ireland Grammar School average while Chemistry, Biology and Double Award Science have been within 5% of the NI Grammar School average.

In recent years at A Level, Biology has been more than 10% above the NI Grammar School average, while Chemistry and Physics have been between 5-10% above.

What we add:

Our pupils have many opportunities for enrichment:
Clubs and Societies include: Animal House, Young Engineers and Astronomy.
At least four Sixth Formers each year receive Nuffield Science Bursaries and Crest Gold Awards in Science for laboratory based projects undertaken and presented during the summer holidays.

Nuffield Science Bursary Winners

A member of our Astrogazers Club viewing Jupiter

Junior pupils in a practical science lesson

A school team from Key Stage 3 finished second in the North Eastern Board in this year's Faraday Challenge, beating all other local grammar schools with their science project.

In 2007 one of our Sixth Formers received the Dr Loughridge Prize for the highest marks in A Level Sciences in the Carrickfergus area. In 2008 another pupil was runner up.

There are strong links between Science and Careers departments eg lecturers from Queen's University and the University of Ulster have given presentations on career opportunities in the areas of Medicine, Dentistry, Biomedical Science, Optometry and Pharmacology, Pharmacy and Dietetics.

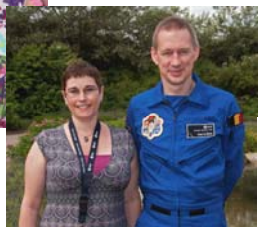
Two members of the teaching staff and the Physics Technician have participated in projects at the National Science Centre at the University of York.

The school is actively involved in the Science, Technology, Engineering and Mathematics (STEM) initiative, providing a wide experience of project based learning for pupils.

Dr Kathy Gibson, Head of Physics, was one of only 2 UK representatives at the first Human Spaceflight Teachers' Workshop held at the Space Research and Technology Centre of the European Space Agency (ESA), Noordwijk, The Netherlands.

Space exploration has captured the imagination of generations of school pupils and has huge potential to engage and motivate pupils today.

Dr Gibson (right) says "I am very fortunate to have been given the opportunity to attend this workshop and will enjoy using the resources and knowledge I have gained with our pupils at Belfast High School".



Dr Gibson with Frank de Winne, first European Commander of the International Space Station.

RECENT FORMER PUPILS
ROLL OF HONOUR IN STEM RELATED SUBJECTS
OXBRIDGE

Rory Beattie	BA Medicine	Downing College, Cambridge
Andrew Crawford	MEng Engineering Science	Balliol College, Oxford
Alan McCreanor	BA Engineering	St John's College, Cambridge
Samantha McCullough	MChem	New College, Oxford
Louise McNutt	BA Medicine	Christ's College, Cambridge
Mark Wilson	MEng Engineering Science	Balliol College, Oxford
David Wotherspoon	MB BChir Medicine	Downing College, Cambridge

RECENT FORMER PUPILS
ROLL OF HONOUR IN STEM RELATED SUBJECTS
QUEEN'S UNIVERSITY AND UNIVERSITY OF ULSTER
(FIRST CLASS HONOURS / MEDICINE ONLY)

Sarah Adams	BDS Dentistry	Queen's University
Eve Armstrong	MB Medicine	Queen's University
Louise Atkinson	PhD Biological Sciences	Queen's University
Claire Bell	BSc Biomedical Science	Queen's University
Rachel Bennett	MPharm Pharmacy	Queen's University
Robert Best	PhD Electrical Engineering	Queen's University
Lisa Campbell	BSc Computing	Queen's University
Jill Deacon	MPharm Pharmacy	Queen's University
Helen Deacon	MB Medicine	Queen's University
David Donaldson	MB Medicine	Queen's University
Samuel Donaldson	MEng Civil Engineering	Queen's University
Gemma Gillespie	BSc Architecture	Queen's University
Claire Gordon	MB Medicine	Queen's University
Gemma Hawkins	BEng Software Engineering	Ulster University
Gillian Irvine	MEng Engineering	Ulster University
Sarah Jamison	BSc Maths with Computing	Ulster University
Claire Johnston	BEd Mathematics	Queen's University
Jonathan McAdams	MSci Physics and Astrophysics	Queen's University
Douglas McDowell	Doctor of Medical Sciences	Ulster University
Claire McManus	MB Medicine	Queen's University
Mark Nolan	BSc Construction Engineering	Ulster University
David Shaw	MEng Computer Science	Queen's University
Samantha Steele	BSc Computing	Queen's University
Ashleigh Spence	MSci Mathematics	Queen's University
Mark Yeung	MSci Applied Maths/Physics	Queen's University
Graham Wills	BSc Architecture	Queen's University

Four Nations Maths Challenge
On Monday 8th November 2010, Belfast High School hosted the Northern Irish bid for mathematical supremacy in the biggest ever online Maths Challenge, in which pupils from England, Scotland, Wales and Northern Ireland went head-to-head for top places on the UK maths leader board!

Elizabeth McParland, Patricia Clack (Maths Advisors - NEELB CASS) and Joe McGurk, Subject Officer for Maths at CCEA were present at the launch along with the Senior Management Team from BHS and members of the local press.

The school continues to enjoy a superb reputation for maths teaching, with three pupils being placed in the top three candidates in Northern Ireland in GCSE Mathematics over the past two years.

A film crew from the Mathletics Company were also in school to video the pupils practising for the Challenge, as well as to record interviews with pupils and staff. The resulting film will be placed on the website of the organising company (www.fournationsmathschallenge.co.uk).